

US EPA ARCHIVE DOCUMENT



Finding Funding For Your Climate and Clean Energy Programs

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Finding Funding for Your Programs



- A. Key Funding Characteristics**
- B. What are Your Funding Options?**
- C. Additional Funding Tips**
- D. More Information on Funding**



A. Key Funding Characteristics

1. Seed Funding versus Sustainable
2. Funding To Spend versus To Repay
3. Categories of Funding



Seed Funding versus Sustainable



- **Seed Funding**

- Typically one-time funding, such as a one-year budget allocation
- Suitable for one-time, short-term programs, or for the startup costs of an ongoing program
- If seed funding is large enough, it can support an ongoing self-funding program like a revolving loan fund

- **Sustainable Funding**

- Ongoing funding over multiple years
- May be self-funding, such as a program that generates revenue or savings
- Sustainable funding could also take the form of a long-term budget commitment, fees, utility public benefit fee, etc.

Funding To Spend versus To Repay



- **To Spend**

- Such as a grant or budget allocation
- If a program does not generate revenue or savings, then a source of money that does not have to be repaid will have to be found

- **To Repay**

- Such as a loan or lease
- Requires a source of revenue or savings to make payments

Categories of Funding



- **Self-Funding Programs**
 - These programs generate revenue or savings
 - Financing may be an option
 - E.g., energy efficiency and renewable energy programs
- **Internal Funding**
 - E.g., budget allocations from the local government
- **External Funding**
 - E.g., grants from a private foundation
- **External Financing**
 - E.g., a tax-exempt lease purchase agreement

B. What Are Your Funding Options?



FUNDING OPTIONS	Seed	Sustain	Spend	Repay	Additional Characteristics
Self-Funding Programs					
1. Behavioral Savings		X	X		Low initial cost; use savings to fund more programs
2. EE and RE Upgrades		X		X	Higher initial cost; finance and use savings to repay
3. Performance contracting*		X		X	An EE option; even the admin can be self-funded
4. Power purchase agreements*		X		X	A RE option; even the admin can be self-funded
5. Fees and sponsorships		X	X		Charge those who benefit: participants, installers, etc.
Internal Funding					
6. Budget allocations	X	X	X		General fund, dept. budget, etc; 1-time or on-going
7. Internal loan or loan fund*	X	X		X	Capital funds, dept. reserves, etc.; 1-time or revolving
8. Public benefit fee, tax		X	X		Implement at community level, or access state fee
External Funding					
9. Utility rebates/ incentives	X	X	X		Existing incentives, or specifically for your program
10. Grants, contributions	X		X		EPA, DOE, foundations, businesses, etc.
11. Tax incentives	X		X		179D commercial deduction; 30% residential RE credit
12. Emission fees, etc.	X	X	X		Petroleum violation fund, environmental penalties, etc.
External Financing*		X		X	* Covered in Webcast 3

1. Behavioral and Operational Energy Savings

- **Low-cost opportunity to make an impact**
- **Savings in public buildings can be used to build a fund for other projects such as energy efficiency upgrades**
 - Key question is how to allocate savings among competing interests: department budget, general budget, incentives for participants, revolving fund to generate even more savings, etc.
- **Ideal for schools, where students can get involved, but also feasible for local government buildings**
- **Philadelphia Schools Case History** – part of this Webcast 2
- **ENERGY STAR Challenge Toolkit** -
www.energystar.gov/index.cfm?fuseaction=publications.showPublications&view=all&st=Program&pub_cat_code=ESCH
- **Portland Green Office Guide** -
www.oregon.gov/ENERGY/CONS/BUS/docs/Green_Office_Guide.pdf

2. Energy Efficiency and Renewable Energy Upgrades

- Higher upfront costs, but the costs can be financed and repaid from the energy savings
- In public buildings, savings (plus rebates and tax incentives) can be used to build a growing fund for more projects
 - Key question 1: use all savings, or just those in excess of payments?
 - Key question 2: how to divide savings among competing interests?
- In private buildings, savings cannot be used to build a fund
 - Savings pay off financing, but owners keep any excess savings
 - Fees and sponsorships can help fund program administration
- Energy Efficiency in Local Government Operations - www.epa.gov/statelocalclimate/documents/pdf/ee_municipal_operations.pdf
- EPA State and Local Climate and Energy Program - www.epa.gov/statelocalclimate/state/topics/energy-efficiency.html

3. Energy Savings Performance Contracting (ESPC)

- **This is a subset of energy efficiency funding – Energy Service Companies (ESCOs) can arrange for financing**
 - Other financing available to local governments, such as tax-exempt lease-purchase agreements, may be less expensive
 - Hiring an ESPC expert to represent your interests may be worthwhile
- **Expert assistance and staff cost can be self-funded, i.e., paid from savings** - www.energyservicescoalition.org/espc/tools/practice09/Self-funded_ESPC_Programs.pdf
- **EPA Introduction to Energy Performance Contracting** - www.energystar.gov/ia/partners/spp_res/Introduction_to_Performance_Contracting.pdf
- **Energy Service Agreements (ESAs) are similar; a developer pays for upgrades and building owner pays for saved energy**
 - www.nyceec.com/esa

4. Power Purchase Agreements (PPAs)

- **This is a subset of renewable energy funding – the PPA developer typically pays for the system and the building owner then pays for the energy produced**
 - Hiring a PPA expert to represent your interests may be worthwhile
- **Expert assistance and staff costs can be self-funded, i.e., paid from energy savings** – (attend Webcast 3 for Sacramento, CA case history)
- **EPA Green Power Partnership -**
www.epa.gov/greenpower/buygp/solarpower.htm
- **Using Solar Power Purchase Agreements to Finance Solar -**
www.icleiusa.org/action-center/learn-from-others/ICLEI_solar_ppa_webinar.pdf
- **Solar PPA legislation status map -**
www.dsireusa.org/documents/summarymaps/3rd_Party_PPA_map.pptx

5. Fees and Sponsorships

- **Who benefits from your program?**
 - Participants – fees for services, loan origination, etc.
 - Contractors – fees to participate in program
 - Retailers – those who sell materials and equipment used in program
- **Who might want to be associated with your program and willing to sponsor it?**
 - Utilities – e.g., Webcast 1 case history from Arlington, VA
 - Businesses – e.g., Webcast 1 case history from Arlington, VA
 - Employers – e.g., attend Webcast 3 for Little Rock, AR case history
 - Community Organizations – local environmental, clean energy, sustainability, economic development, and other groups

6. Budget Allocations

- From the general fund, capital budget, etc.
- Could be a one-time allocation or an ongoing commitment
- If the allocation is used for efficiency upgrades, the savings could be used to fund more upgrades.
- Ongoing commitments can be susceptible to changes in leadership and/ or a budget crisis. This problem is minimized if the allocated funds can be committed to and transferred to a third-party entity, such as an administrator or a **public-private partnership**. (e.g., Philadelphia Schools case history, included in this Webcast)

7. Internal Loans and Revolving Loan Funds (RLFs)

- Funding can come from budget allocations, grants, or other sources.
- Funding can also come from department reserves, Treasurer investment accounts, or other internal sources that are looking for a secure and attractive return
 - Sustainable Endowments Institute offers a model for colleges that might be copied by local communities - www.greeningthebottomline.org
- Try to balance a low interest rate to drive demand versus a higher rate to help pay for program administration costs
- DOE– State and Municipal Revolving Loan Funds - <http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/revolvingloanfunds.html>
- Revolving Loan Funds: Basics and Best Practices - www.nrel.gov/applying_technologies/state_local_activities/pdfs/tap_webinar_2009_0826_booth.pdf

8. Public Benefit Fee or Tax

- A public benefit fee (PBF) is a charge on utility bills paid by all ratepayers or an entire class of ratepayers to support programs like energy efficiency that offer a public benefit
- A dedicated tax would typically be charged on sales, income, or property values
- PBFs and taxes typically need to be balloted in an election
 - Requires political support at the top, and campaign finance support
 - May be difficult to pass in the current economic climate
- If your state has a PBF, explore tapping that fund
- A PBF could fund a Sustainable Energy Utility - www.seu-de.org
- EPA Public Benefits Funds - www.epa.gov/chp/state-policy/funds.html
- DOE Public Benefit Funds Fact Sheet - http://www1.eere.energy.gov/manufacturing/states/pdfs/pbf_factsheet.pdf

9. Utility Rebates and Incentives

- **Leverage existing utility programs – check their websites and call them**
 - Learn about their motivations and ask how you might augment their existing programs for Demand Side Management and Peak Load Reduction
 - Investor-owned utilities must balance community and shareholder interests; municipal and co-op utilities do not have this conflict
- **Or discuss support specifically tailored to your program**
 - e.g., Webcast 1 case history from Arlington, VA
- **Rebates are not typically sustainable long-term**
- **DSIRE Database of State Incentives for Renewables and Efficiency** - www.dsireusa.org
- **State Clean Energy Practices: Renewable Energy Rebates** - www.nrel.gov/analysis/pdfs/45039.pdf

10. Grants and Contributions

- Use for one-time programs or as seed capital for a self-funding program
- Businesses with a vested interest may make contributions
 - e.g., Webcast 1 case history from Arlington, VA
- Private foundations are moving from grants towards mission-related investments – low interest long-term loans
- Grantors are looking for sustainable programs that can overcome barriers to success and be replicable in other communities - a program that is already in the pilot stage will have a better chance of being funded.
- EPA Green Building – Funding Opportunities - www.epa.gov/greenbuilding/tools/funding.htm
- USDA REAP Rural Energy for America Program - www.rurdev.usda.gov/BCP_Reap.html

11. Tax Incentives

- Tax incentives may not offer funding, but they can reduce the amount of funding that is needed
- **Federal**
 - 179D commercial building energy efficiency tax deduction offers up to \$1.80 per SF deduction; even public entities can benefit - http://apps1.eere.energy.gov/buildings/commercial_initiative/179d/
 - 30% residential renewable energy tax credit - <http://energy.gov/savings/residential-renewable-energy-tax-credit>
- **State**
 - DSIRE Database of State Incentives for Renewables and Efficiency - www.dsireusa.org

12. Emission Fees, Petroleum Violation Funds, etc.

- Air and other environmental violations can be used to fund a program - e.g., <http://deq.mt.gov/energy/renewable/altenergyloan.mcp>
- Petroleum Violation Escrow Fund money can also be used to fund a program - www.seco.cpa.state.tx.us/lis/
- These funds are typically controlled by the state, but may be available for local programs
- Alliance to Save Energy – Brief #1: Funding Mechanisms for Energy Efficiency - <http://ase.org/resources/brief-1-funding-mechanisms-energy-efficiency>

13. External Financing - to be covered in Webcast 3

- **Program financing models will include:**
 - Revolving loans
 - PACE – Property Assessed Clean Energy
 - Credit enhanced private loans
 - HUD PowerSaver
 - OBR – On-Bill Repayment
 - EEMs – Energy Efficient Mortgages
 - Performance Contracting
 - Power Purchase Agreements and Solar Leasing
- **Topics will include:**
 - Working with community development financial institutions (CDFIs)
 - Is PowerSaver an option for your community?
 - What finance models are best for your circumstances?

C. Additional Funding Tips



- 1. Successful funding may require a combination of options, with some providing seed money for start-up costs and others covering ongoing operations.**
- 2. If your planning process (stakeholder engagement, available resources, etc.) does not identify good funding opportunities, behavioral and operational changes can be a low-cost and effective place to start.**
- 3. Programs aimed at the public sector (e.g., Lead By Example) may be easier to fund and implement than other programs where uptake is less assured. In addition, the energy savings can help cover the staff costs required to run the program.**
<http://www.epa.gov/statelocalclimate/local/local-examples/case-studies.html#all>

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Additional Funding Tips... continued



- 4. When seeking funding from internal and external stakeholders, it may be better to talk about jobs, economic development, energy savings, and energy price stability, more than climate change.** (e.g., Webcast 1 case history from Arlington, VA)
- 5. When estimating your funding requirements, it is crucial to be absolutely objective and conservative; hope for the best, but budget for the worst.**
- 6. The simpler a program is to implement and for the participants to understand, the more likely it is to be successful.**

D. More Information on Funding



EPA ENERGY STAR tools:

1. **Portfolio Manager: to prioritize projects and measure progress -**
www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager
2. **Target Finder: to set energy targets during new building design**
- www.energystar.gov/index.cfm?c=new_bldg_design.bus_target_finder
3. **Building Upgrade Value Calculator -**
www.energystar.gov/index.cfm?c=comm_real_estate.building_upgrade_value_calculator
4. **Financial Calculator: to show the impact on profits, etc. -**
www.energystar.gov/index.cfm?c=assess_value.financial_tools
5. **Cash Flow Opportunity Calculator: to see the cost of delay -**
www.energystar.gov/ia/business/downloads/A_Look_Inside_the_Cash_Flow_Opportunity_Calculator_FINAL.pdf?61b9-4fca

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More Information on Funding... continued



Other resources:

- 6. EPA State and Local Climate and Energy Program – Energy Efficiency** - www.epa.gov/statelocalclimate/state/topics/energy-efficiency.html
- 7. EPA Clean Energy Financing Programs – the Decision Guide includes many useful Resources** - <http://epa.gov/statelocalclimate/state/activities/financing.html>
- 8. EPA ENERGY STAR – Financing Guidebook for Energy Efficiency Program Sponsors** - www.energystar.gov/ia/home_improvement/downloads/FinancingGuidebook.pdf
- 9. EPA Combined Heat and Power Partnership – Funding Database** - www.epa.gov/chp/funding/financial.html
- 10. EPA Resources for Funding LBE Programs** - www.epa.gov/statelocalclimate/documents/pdf/epa_lbe_appendixd.pdf

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More Information on Funding... continued



- 11. EPA Climate Showcase Community case histories -**
www.epa.gov/statelocalclimate/local/showcase/
- 12. DOE Solution Center – Financing Solutions and Guidebook -**
<http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/default.html>
- 13. DOE National Action Plan for Energy Efficiency – Customer Incentives for Energy Efficiency Through Program Offerings -**
www.epa.gov/cleanenergy/documents/suca/program_incentives.pdf
- 14. National Governors Association Center for Best Practices – State Clean Energy Financing Guidebook -**
www.nga.org/files/live/sites/NGA/files/pdf/1101CLEANENERGYFINANCING.PDF
- 15. ACEEE American Council for an Energy Efficient Economy – Publications and Resources -**
www.aceee.org/publications?pubtype=Research+Report

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More Information on Funding... continued



- 16. ICLEI Local Governments for Sustainability USA – Resources -**
www.icleiusa.org/action-center
- 17. Green Building Finance Consortium – Resources -**
www.greenbuildingfc.com/Home/ResearchLibrary.aspx
- 18. ASE Alliance to Save Energy – Resources -** <http://ase.org/resources>

Contact Information



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